



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/567,998

02/10/2006

Thomas Freser-Wolzenburg

5511008

7485

23280 7590 05/03/2007
DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1722

MAIL DATE

DELIVERY MODE

05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,998

Applicant(s)

FRESER-WOLZENBURG,
THOMAS

Examiner

Joseph Leyson

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☒ Claim(s) 18 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 22-25 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 14-21, drawn to a molding tool, classified in class 249, subclass 115.
- II. Claims 22-25, drawn to a method for producing molded foam bodies, classified in class 264, subclass 51.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process, such as a method which does not produce foam bodies such as a non-foamed plastic body, or a method which does not use an expandable reactive mixture, wherein the foaming does not occur by reactions.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention (Group I), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22-25 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Specification

2. The disclosure is objected to because of the following informalities: the specification (i.e., paragraph [0008]) should not refer to the instant claims because claim content can change during prosecution thereof.

Appropriate correction is required.

Claim Objections

3. Claims 18 and 21 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 18 and 21 do not further recite structure or structural relationships and only further relate to the intended use of the claimed apparatus. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); see MPEP 2114. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in

Art Unit: 1722

determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 20 recites that the permanent anti-adherence coating having the diamond like coating has a thickness of at least 10 μm which is NEW MATTER because such subject matter was NOT originally disclosed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 15, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al. (U.S. Patent 5,112,025).

Nakayama et al. (U.S. Patent 5,112,025) teach a molding tool for producing molded bodies by filling a molding material into a mold (i.e., col. 1, lines 6-65) including shaping internal surfaces having a permanent anti-adherence coating made of a fluorinated plastic or a diamond-like coating (i.e., cols. 3, line 26, to col. 6, line 26). The diamond-like coating has a thickness of 300 to 20,000 angstroms (0.03 to 2 micrometers) (i.e., col. 5, lines 28-30). The fluorinated plastic coating has a thickness from about 30 to about 200 angstroms (from about 0.003 to about 0.02 micrometers) (i.e., col. 6, lines 43-47). As to the instant claim recitations of "for producing molded foam bodies by filling an expandable reactive mixture into a mold" and of "a polyurethane molded foam body molding tool", such recitations relate to the intended use of the claimed apparatus. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); see MPEP 2114. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." *In re Young*, 75 F.2d 996, 25 USPQ 69 (CCPA

1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115.

8. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Miya et al. (U.S. Patent 6,517,339).

Miya et al. (U.S. Patent 6,517,339) teach a molding tool for producing molded bodies by filling a molding material into a mold 2 including shaping internal surfaces having a permanent anti-adherence coating 20, 30 including a diamond-like film 30 and a wear-resistant hard material ceramic component 20 (i.e. fig. 3; cols. 2-3). The diamond-like coating has a thickness of 1-5 micrometers (col. 6, lines 38-39) and of 10 micrometers (see DLC film thickness in table in col. 14).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (U.S. Patent 5,112,025).

Nakayama et al. (U.S. Patent 5,112,025) disclose the tool substantially as claimed, as mentioned above, except for the thickness limitations, as recited by the instant claims. Nakayama et al. (U.S. Patent 5,112,025) further disclose that if the thickness of the diamond-like coating is too thin the reinforcing effect is not achieved, or is too thick it will come off (i.e., col. 5, lines 28-39), and that thickness of the fluorinated

Art Unit: 1722

plastic coating depends on the surface requirements of the molded product (i.e., col. 6, lines 26-48).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the thickness of the tool of Nakayama et al. (U.S. Patent 5,112,025) with the thickness limitations of any one of instant claims 16, 17 and 20 because such thicknesses would have been found by an artisan of ordinary skill in view of the teachings of Nakayama et al. (U.S. Patent 5,112,025) depending upon the desired properties of the mold and the molded product. Furthermore, where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

11. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al. (U.S. Patent 5,112,025) in view of either applicant's admission or Nun et al. (U.S. Patent Application Publication US 2003/0147932).

Nakayama et al. (U.S. Patent 5,112,025) disclose the tool substantially as claimed, as mentioned above, except for the anti-adherence coating being a lotus leaf-type microstructuring coating, as recited by instant claim 14.

Applicant admits (instant paragraph [0009]) that the design and manufacture of a surface having a lotus leaf-type microstructure is known per se.

Nun et al. (U.S. Patent Application Publication US 2003/0147932) disclose an anti-adherence coating which is a lotus leaf-type microstructuring coating (i.e., paragraphs [0005] to [0068]) which can be used in place of fluorinated plastic coatings (i.e., paragraphs [0007] to [0010]).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the anti-adherence coating (which includes the fluorinated plastic coating) of Nakayama et al. (U.S. Patent 5,112,025) to be a lotus leaf-type microstructuring coating because applicant admits that such an anti-adherence coating is well known, or because such a lotus leaf-type microstructuring coating is well known in the coating art as an anti-adherence coating and is known as an alternative anti-adherence coating to a fluorinated plastic coating, as disclosed by Nun et al. (U.S. Patent Application Publication US 2003/0147932).

Response to Arguments

12. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the molding tool claimed in claim 18 is a polyurethane molded foam body molding tool. Polyurethane molded foam body molding tools are known specific types of molding tools to those of skill in the art, and thus recite a structure different from other molding tools. For example, a compact disc (CD) case is a different structure to those of skill in the casing art than a tape cassette case. Polyurethane molded foam body molding tools do not have stampers or other parts found with CD molds, and are known to those of skill in the art as different structures.

Art Unit: 1722

Applicant argues that neither Nakayama et al. nor Miya et al. teaches or discloses "a molding tool for producing molded foam bodies by filling an expandable reactive mixture into a mold." The molds of Nakayama and Miya are disk molds, for molding, for example, a compact disk, an optical disk, a laser disk or the like (see col. 1, lines 6 to 12 of Nakayama and col. 1 lines 6 to 13), which are different from expandable molded foam body molds. The disks (e.g. CDs) are made of heated fluid which is pressed. The present invention is a mold for an expandable reactive mixture, such as those for use with polyurethane foam. It is respectfully submitted that it would not have been obvious to one of skill in the art to look to disk molds for teachings related to molded foam body molds.

The examiner agrees that different arts have different mold features. However, claim 18 does NOT recite any positive structures or features which limits the molding tool to any particular molding art. Note that a polyurethane molded foam body molding tool is the same as a molding tool for producing a polyurethane molded foam body. Producing a polyurethane molded foam body is related to the intended use of the claimed apparatus and does NOT have any patentable weight in apparatus claims (see case law above), as mentioned above. In other words, if you have a mold, the structure of the mold does NOT change whether clay, plastic or foam is being molded in the mold.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

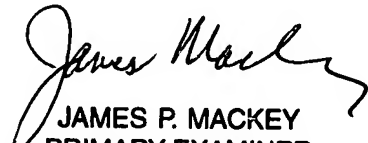
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JL


JAMES P. MACKEY
PRIMARY EXAMINER
4/27/07